

JAN 23 2002

510(K) SUMMARY OF SAFETY AND EFFECTIVENESS

Name of Firm: Blackstone Medical, Inc.
90 Brookdale Drive
Springfield, MA 01104

510(k) Contact: Alan Lombardo
Director of Engineering

Trade Name: Blackstone™ Spinal Fixation System
4.5mm Mono-Axial Screw (System Addition)

Common Name: Rod and screw spinal instrumentation

**Device Product Code
& Classification:** MNH 888.3070 - Spondylolisthesis Spinal
Fixation Device System
KWQ 888.3060 - Spinal Intervertebral Body Fixation
Orthosis
MNI 888.3070 - Pedicle Screw Spinal System

**Substantially
Equivalent Devices:** DePuy Motech Moss Miami Spinal System (K980477,
K982320).

Device Description:

The Blackstone™ Spinal Fixation System 4.5mm Mono-Axial Screw is a titanium alloy; multiple component system comprised of a variety of non-sterile, single use components that allow the surgeon to build a spinal implant construct. The system is attached to the vertebral body by means of screws to the non-cervical spine.

The Blackstone™ Spinal Fixation System consists of an assortment of screws and rods which have received 510k clearance (K994217 & K003735). The 4.5mm Mono-Axial Screws are new implant offerings, which are an adjunct and are fully interchangeable with the Spinal Fixation System (K994217 & K003735).

Intended Use / Indications for Use:

Blackstone Spinal Fixation System is intended for non-cervical use in the spine.

The Blackstone Spinal Fixation System, when used for pedicle screw fixation, is intended only for patients:

- a) Having severe spondylolisthesis (Grades 3 and 4) at the L5-S1 joint;
- b) Who are receiving fusion using autogenous bone graft only;
- c) Who are having the device fixed or attached to the lumbar and sacral spine (L3 and below); and
- d) Who are having the device removed after the development of a solid fusion mass.

The Blackstone Spinal Fixation System, when used as a pedicle screw system in skeletally mature patients, is intended to provide immobilization and stabilization of spinal segments, as an adjunct to fusion, in treatment of the following acute and chronic instabilities or deformities of the thoracic, lumbar and sacral spine:

- a) Degenerative spondylolisthesis with objective evidence of neurologic impairment;
- b) Fracture;
- c) Dislocation;
- d) Scoliosis;
- e) Kyphosis;
- f) Spinal tumor; and
- g) Failed previous fusion (pseudarthrosis).

The Blackstone Spinal Fixation System, when used for anterolateral non-pedicle fixation, is intended for the following indications:

- a) Degenerative disc disease (as defined as back pain of discogenic origin with degenerative disc confirmed by patient history and radiographic studies);
- b) Spinal stenosis;
- c) Spondylolisthesis;
- d) Spinal deformities (i.e., scoliosis, kyphosis, and/or lordosis);
- e) Pseudarthrosis;
- f) Tumor;
- g) Trauma (i.e., fracture or dislocation);
- h) Previous failed fusion.

Premarket Notification
Blackstone Medical, Inc.
Blackstone™ Spinal Fixation System
4.5mm Mono-Axial Screw (System Addition)
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BASIS OF SUBSTANTIAL EQUIVALENCE:

The Blackstone™ 4.5mm Mono-Axial Screw by its very nature is substantially equivalent to the DePuy Motech Moss Miami Spinal System (K980477, K982320) which has been cleared by FDA for certain anterior and pedicle fixation use indications.



Food and Drug Administration
9200 Corporate Boulevard
Rockville MD 20850

JAN 23 2002

Mr. Alan Lombardo
Director of Engineering
Blackstone Medical Incorporated
90 Brookdale Drive
Springfield, MA 01104

Re: K013558
Trade Name: Blackstone™ Spinal Fixation System – 4.5 mm Mono Axial Screws
Regulation Number: 21 CFR 888.3060 and 888.3070
Regulation Name: Spinal Intervertebral Body Fixation Orthosis, Spondylolisthesis Spinal
Fixation Device System, Pedicle Screw Spinal System
Regulatory Class: II
Product Code: KWQ, MNH, MNI
Dated: October 24, 2001
Received: October 25, 2001

Dear Mr. Lombardo:

We have reviewed your Section 510(k) notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

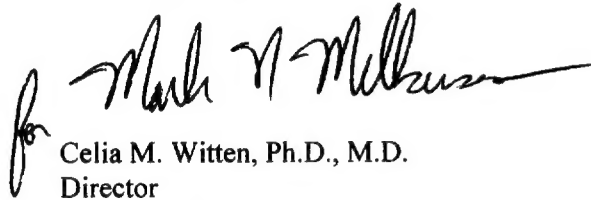
If your device is classified (see above) into either class II (Special Controls) or class III (Premarket Approval), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 895. A substantially equivalent determination assumes compliance with the current Good Manufacturing Practice requirement, as set forth in the Quality System Regulation (QS) for Medical Devices: General regulation (21 CFR Part 820) and that, through periodic (QS) inspections, the Food and Drug Administration (FDA) will verify such assumptions. Failure to comply with the GMP regulation may result in regulatory action. In addition, FDA may publish further announcements concerning your device in the Federal Register. Please note: this response to your premarket notification submission does not affect any obligation you might have under sections 531 through 542 of the Act for devices under the Electronic Product Radiation Control provisions, or other Federal laws or regulations.

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This letter will allow you to begin marketing your device as described in your 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4659. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers Assistance at its toll-free number (800) 638-2041 or at (301) 443-6597, or at its Internet address "<http://www.fda.gov/cdrh/dsmamain.html>".

Sincerely yours,

A handwritten signature in black ink, appearing to read "Celia M. Witten", with a stylized flourish at the end.

Celia M. Witten, Ph.D., M.D.
Director
Division of General, Restorative and
Neurological Devices
Office of Device Evaluation
Center for Devices and Radiological Health

Enclosure

510(k) Number: K 0 1 3 5 5 8 (1 o r 2)

Device Name: *Blackstone™ Spinal Fixation System*

Indications for Use:

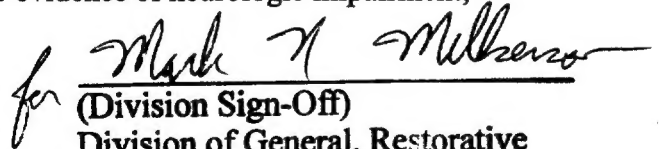
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- a) Degenerative spondylolisthesis with objective evidence of neurologic impairment;
- b) Fracture;
- c) Dislocation;
- d) Scoliosis;
- e) Kyphosis;
- f) Spinal tumor; and
- g) Failed previous fusion (pseudarthrosis).

for 
(Division Sign-Off)
Division of General, Restorative
and Neurological Devices

510(k) Number K013558

The Blackstone Spinal Fixation System, when used for anterolateral non-pedicle fixation, is intended for the following indications:

- a) Degenerative disc disease (as defined as back pain of discogenic origin with degenerative disc confirmed by patient history and radiographic studies);
- b) Spinal stenosis;

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Premarket Notification
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4.5mm Mono-Axial Screw (System Addition)
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- c) Spondylolisthesis;
- d) Spinal deformities (i.e., scoliosis, kyphosis, and/or lordosis);
- e) Pseudarthrosis;
- f) Tumor;
- g) Trauma (i.e., fracture or dislocation);
- h) Previous failed fusion.

Concurrence of CDRH, Office of device Evaluation

Prescription Use X

OR

Over-The-Counter Use _____

(Per 21 CFR801.109)

for Mark H. McQuinn
(Division Sign-Off)

Division of General, Restorative
and Neurological Devices

510(k) Number _____

K013558